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10/719,167	11/21/2003	Hailan Guo	A01325	2354
21898 7590 01/11/2008 ROHM AND HAAS COMPANY PATENT DEPARTMENT 100 INDEPENDENCE MALL WEST PHILADELPHIA, PA 19106-2399			EXAMINER MULCAHY, PETER D	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/719,167  
Filing Date: November 21, 2003  
Appellant(s): GUO ET AL.

**MAILED**

**JAN 11 2008**

**GROUP 1700**

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Kenneth Crimaldi  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 15, 2007 appealing from the Office action mailed July 3, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,384,096	Sonnabend	05-1983
5,451,641	Eisenhart et al.	09-1995

2001/0031714

Gassenmeier et al.

10-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonnabend or Gassenmeier et al. each taken alone and in view of Eisenhart et al.

Sonnabend US 4,384,096 or Gassenmeier et al. US 2001/0031714 teach "controlled" or "(physico)chemical switch" which use polyelectrolyte polymeric blends, see Sonnabend at columns 6 lines 7+, and Gassenmeier et al. [0142]. This is the same as a "triggered response" composition as claimed.

These patents further suggest the polymer crosslinking and monomeric constituents as claimed, see Sonnabend at columns 7 lines 5+, and Gassenmeier et al. [0143].

The difference between the claimed invention and the cited art is that the art fails to provide an example of the multi-stage polymerization.

The Eisenhart et al. patent shows the use of multi-stage polymerization process for the preparation of polymer particles. This patent uses the claimed monomers and those used in Sonnabend and Gassenmeier et al.

One of ordinary skill would find it prima facie obvious to use the multi-stage process of Eisenhart et al. for the preparation of the polymer particles of Sonnabend and Gassenmeier et al.

It should be noted that claim 1 can be interpreted differently. Claim 1 is directed to a composition. The composition incorporates an emulsion polymer. The language "multi-stage" intends to limit the emulsion polymer and render it patentably distinct from the alleged "single-stage" polymers of the prior art. The "multi-stage" language is a process limitation. The emulsion polymer and composition comprising the emulsion polymer are products. As such, this is read as a product-by-process. Case law has well established that the patentability of product-by-process claims is dependent upon the product. Having said this, the "multi-stage" language is only limiting to the extent that the products are different. There is no showing or allegation as to how the products are different.

The comparative data in the specification has been fully considered. This does not sufficiently rebut the prima facie case of obviousness set forth herein. The results are in no way commensurate in scope with the claimed invention and fail to compare the claimed invention with the closest art of record.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 5 and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 and 1-10 of copending Application No. 10/619,061 and 10/348,375, respectively, in view of Eisenhart et al.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed triggered response composition claimed uses the same polyelectrolyte polymer blend as those in the copending claims. The crosslinked nature of the 2<sup>nd</sup> polymer is suggested in the claims in 10/619,061 by the incorporation of the crosslinking agents. The polyethylenically unsaturated monomer incorporated in the polymer blend of 10/348,375 suggests crosslinking. The Eisenhart et al. patent renders obvious the multi-stage polymerization process limitations.

#### **(10) Response to Argument**

Appellant argues that there is no motivation to use the "multi-stage" polymerization techniques as shown in Eisenhart et al. when preparing the copolymers

of either Sonnabend or Gassenmeier et al. This is not persuasive. It is well established that motivation to modify prior art frequently comes from knowledge generally available to one of ordinary skill in the art. Here the knowledge generally available to one of ordinary skill in the art provides sufficient motivation to modify the polymerization techniques of Sonnabend and Gassenmeier to the "multi-stage" polymerization techniques of Eisenhart. Sonnabend and Gassenmeier are not limited to single stage emulsion polymerization and they clearly do not exclude "multi-stage" polymerization techniques. To the contrary, "multi-stage" polymerization techniques are well known and used in the preparation of polymers for many different end uses. One having knowledge generally available in the art readily appreciates that the "multi-stage" polymerization techniques of Eisenhart would provide a desirable polymer when practiced within the teachings of Sonnabend or Gassenmeier. Eisenhart describes the advantages of the multi-stage polymerization at column 3 lines 49+. Specifically, the polymerization in stages allows for the manipulation of the monomer type and content within the resultant polymer. Such an advantage would be appreciated when polymerizing the monomers of Sonnabend and/or Gassenmeier. One having ordinary skill in the art would understand the property manipulation afforded by the multi-stage polymerization and be motivated to employ the multi-stage polymerization when practicing the inventions of either Sonnabend or Gassenmeier. Obviousness does not require absolute predictability but rather a reasonable expectation of success. In the instant case, one clearly has a reasonable expectation of success.

The alleged unexpected results, specifically Example 2, page 35 of the specification, have been fully considered. These do not sufficiently rebut the prima facie case of obviousness set forth herein. The examples do not support the breadth of the claims and fail to represent the closest prior art. Further, the examples do not compare the same monomeric constituents when attempting to show unexpected results with respect to the multi-stage when compared to the single stage polymerization. While the resultant polymers have different properties they are not seen to be unexpected. Different polymers are expected to have different properties. This is not unexpected. The patent to Eisenhart teaches the multi-stage polymerization and that the polymerization in stages allows for the manipulation of the monomer type and content within the resultant polymer. This is consistent with the showing of record.

The rationale behind the obviousness-type double patenting is basically the same as the art rejection. The examiner maintains that Eisenhart is combinable with the copending claims for the rationale advanced supra.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Peter D. Mulcahy/

Peter D. Mulcahy

Primary Examiner

Art Unit 1796

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